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(54) Title: **VAPOUR DEPOSITION METHOD**

(57) Abstract: In a vapour deposition method which can be used to deposit mixtures of materials in progressively varying amounts on a substrate (1) and which can be used for a variety of purposes, but is of especial value in combinatorial chemistry, the path of the vaporised material from the source (3) to the substrate (1) is partially interrupted by a mask (5), the positioning of the mask in a plane parallel to the plane defined by the substrate (1) being such that the material is deposited on the substrate (1) in a thickness which increases substantially continuously in a direction along the substrate (1).



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